VII. An Entomological Excursion to Corsica. By George C. Champion, F.Z.S.

[Read Feb. 28th, 1894.]

My friend, Mr. R. S. Standen, having determined to make an entomological expedition to the mountains of Corsica, I, at the last moment, decided to accompany him, and, accordingly, we started together on May 28th last, arriving at Ajaccio on the morning of May 30th, and at the hotel at La Foce de Vizzavona, our proposed head-quarters, the same evening. Here we remained about a month, being joined later on by Mr. A. H. Jones, Colonel Yerbury, R.A., Mr. Lemann, and others, Mr. Raine of Hyères having preceded us by some weeks. Altogether, we were quite a large party, all, however, on Lepidoptera intent, myself and Colonel Yerbury excepted. Mr. Standen has already (Ent. 1893, pp. 236-238, and pp. 259-263) given us an account of his experiences with the Lepidoptera (Rhopalocera), for most of which we appeared to be too early, the season in the mountains being very backward compared to the semi-tropical coast region. I devoted myself almost exclusively to the Coleoptera and Hemiptera-Heteroptera; and it is proposed here to give an account of the species met with, adding to my list some others (chiefly Longicornia and Buprestidæ) subsequently obtained by Colonel Yerbury-who remained till August,-which he kindly handed over to me on his return. The Hemiptera-Heteroptera have been entirely determined by Mr. E. Saunders. Our head-quarters at Vizzavona, on the summit of the Col between Bocognano and Tattone, on the main road between Ajaccio and Bastia, at an elevation of about 4,000 feet, and commanding a splendid view of the lofty Mont d'Oro, proved to be a capital centre for collecting. In the immediate vicinity of the hotel, though it is not visible till the summit of the Col is reached, is a splendid forest, composed almost entirely of beech and Corsican pines (Pinus laricio), some of the trees being exceedingly lofty, the beech ascending TRANS. ENT. SOC. LOND. 1894.—PART I. (MARCH.)

higher up the mountain slopes than the pines. The beeches are more or less covered with moss, indicating a humid climate, though the coast region is excessively dry and arid at this season. The forest entirely fills the head of the valley on the northern side of the Col, and in it there was an abundance of fallen timber just ready for the Coleopterist; this being partly due to the fact that a large number of trees had been felled for the purposes of the new railway, which passes in a long tunnel right under the forest. Lower down, on either side of the Col, to Bocognano on the one side, and Tattone on the other, there are plenty of magnificent chestnuts and other trees, with green meadows and small patches of cultivation. Below Bocognano, right down to Ajaccio, the hill-sides are in many places covered with a dense bush or "macchie," chiefly composed of arborescent heath, arbutus, evergreen oak, myrtle, and Cistus, with, in the opener places, an abundance of aromatic Labiate and other plants. At Ajaccio itself there is the usual semi-tropical vegetation of the Mediterranean region, the abundance and thriving condition of the introduced Opuntias, etc., recalling to my mind visions of distant tropical climes. The mountain slopes for some distance above the limits of the forest are clothed in many places with a dense, almost impenetrable, growth of dwarf alder, such as I have seen nowhere else, the alders coming into flower directly the snow melts, the ground beneath them at this time being bright with crocuses, though no gentians were seen. The mountain summits are more or less serrated, excessively rugged, and barren, and it is not easy to find workable spots, nor, indeed, to get about, many of the ridges being impassable without a long detour. There is also a scarcity of water; even in some of the valleys the streams are small, the Gravone itself being lost in the marsh and sand before reaching the Bay of Ajaccio. In the forest at Vizzavona not many flowering plants were to be seen, beyond foxgloves, a beautiful Pancratium, an asphodel, a Cyclamen and a Sambucus; but lower down at Tattone, etc., there were plenty of Umbelliferæ, Orchidaceæ, Compositæ, etc. Though Monte d'Oro and Monte Retondo were within comparatively easy distance of Vizzavona, I did not attempt an ascent of either of them, contenting myself with working to the summit of the Col between the hotel and Ghisoni, to an elevation of a little over 6,000 feet.

From Vizzavona, excursions were made to Tattone, Vivario, Corte, Bocognano, Tavera, Ajaccio, etc., the railway helping a good deal for this purpose; but most of the time was spent in the mountains. At Corte, about halfway between Vizzavona and Bastia, in the northern central part of the island, to which we made a pleasant three days' excursion, the heat notwithstanding, there is more water, the united streams, the Restonica and Tavignano, forming a river of considerable size, the banks of which were productive in small Coleoptera. Of the cork-oaks, of which there are forests in some parts of the island, we saw very few in any of the places visited. Bocognano we received a good deal of assistance and kind hospitality from Dr. Trotter, this place producing many of the species peculiar to the "macchie" and to the low country. Still, my list contains but a meagre assortment of these latter, it being already much too late in the season for most of them, everything being by this time parched up near the coast. One thing struck me as peculiar, viz., the scarcity of Cryptocephalus; a similar amount of work in the south of France or Spain would have produced many species.

Corsica contains a large number of Coleoptera peculiar to itself, upwards of two hundred being given in the last European Catalogue (v. Heyden, Reitter, and Weise, 1891) from Corsica alone, the Staphylinide and the Rhynchophora each having over thirty peculiar species; and perhaps a still larger number of species are common to Corsica and Sardinia, and which do not extend on to the Italian mainland. One of the most characteristic genera, and one most in evidence, is Percus (a close ally of Pterostichus), which is represented by several peculiar species, its other members inhabiting Italy, Sardinia, Sicily, the Balearic Islands, and Spain. One abundant insect in the island, Cetonia aurata. affords an instance of the extraordinary amount of variation possible within the same species, the different varieties occurring together indiscriminately, and quite irrespective of a varied geographical distribution, or of a difference in altitude of the locality. Two very interesting papers have already been published on the Coleoptera of the island: (1) "Ein entomologischer Ausflug in die Berge Süd-Corsica's," by G. Dieck (Berl. ent. Zeitschr., 1870, pp. 397-404). This exceedingly

successful collector paid special attention to the Pselaphidæ, Scydmænidæ, Dytiscidæ, etc.; he gives a most interesting account of his entomological experiences in the southern part of the island, where he made excursions with M. Revelière, a well-known Coleopterist residing at that time in Corsica, and to whom we are largely indebted for our knowledge of its insect-fauna. It is to be hoped that some day Dieck's paper will be translated into English and published here, as has already been done with his paper on Andalusia (cf. Ent. 1888, pp. 38 et seq.). (2), "Notes on some Corsican Insects," by the Rev. T. A. Marshall (Ent. Monthly Mag., vii., pp. 225-228). In this paper Mr. Marshall gives a most accurate description of the general features of the parts of the island he visited, with a list of all the Coleoptera he had captured and been able to name; but no Dytiscidæ or Staphylinidæ are mentioned, nor many of the smaller species. Amongst my captures are many species not noticed by either Dieck or Marshall, and I propose to give here a list of all the species I have been able to identify, adding to my list, as I have stated above, some others subsequently obtained by Colonel Yerbury, chiefly at Tattone, where a saw-mill was started soon after I left. MM. Fauvel and Bedel, the wellknown French Coleopterists, have kindly assisted me in determining many of the more obscure species, the former with the Staphylinide, the latter with the Carabida, Curculionida, etc. Representatives of about 510 species were obtained in all, including a good many of the peculiar Corsican forms.

Before commencing my list, it is perhaps as well to give a short account of the general run of species met with in the different localities visited.

At Vizzavona, in the forest, under the bark of the decaying beeches, were to be found Endophloeus spinulosus, Coxelus pictus, Brontes planatus, Bolitochara lunulata, etc., in plenty; and Colydium elongatum, Ipidia quadrinotata, two species each of Paromalus and Cerylon, Litargus bifasciatus, Orchesia undulata, Melandrya caraboides, Melasis buprestoides, Sipalia scabripennis, Phlœocharis corsica, Placusa, sp. n. (?), etc., sparingly: in the older trees, with looser bark, Pterostichus ambiguus and Pristonychus carinatus, both commonly; and in those with plenty of moss and fungi on the bark,

Platyrrhinus latirostris, Peltis grossa, Diaperis boleti, Triplax rufipes, etc., the first and last-named in numbers. Under the bark of the dead pines, especially of those still standing, Helops superbus, a very fine species peculiar to the island, and H. caruleus, Menephilus curvipes, Uloma culinaris and U. perroudi, Adelocera carbonaria, Elater præustus and E. pomonæ, and Brachytemnus porcatus, more or less commonly, and Tenebrioides maroccanus, Nudobius collaris, etc., sparingly; on the bark of these trees Chalcophora mariana and Dictyoptera sanguinea were sometimes to be met with. In recently fallen pines Acanthocinus griseus, Pogonocharus perroudi, Pissodes notatus, two species of Ernobius, Šalpingus nitidus, Helops genei, etc., were to be found on the branches; and in or under the bark, in addition to plenty of Scolytidæ and the abundant Clerus formicarius, Platysoma oblongum, two species of Plegaderus, Nemosoma, Autonium bicolor, two species of Corticeus, Clerus quadrimaculatus, Xylita revelièrei, etc. One specimen of Lucanus tetraodon was found in a rotten pine stump (numerous others were subsequently obtained by Colonel Yerbury); and the gigantic larva or pupa of the large Prionid, Ergates faber, sometimes occurred in similar situations, or under the bark of the lofty standing dead pines. Three species of the characteristic Carabideousgenus Percus were not uncommon under stones, logs, etc., two of them also occurring on the barer mountain sides; a Telephorus (pracox) frequented the foxgloves; and Morimus lugubris was abundant all over the place, it being especially fond of a heap of cut beech logs near the hotel. On the mountain sides a pretty little Malacoderm, Malachius longicollis, frequented almost every flower; an Asida, a Thylacites, some Harpali, etc., occurred beneath stones, and Meloe brevicollis was occasionally found crawling on the grass. Higher up in the mountains a Brachyderes (analis\*) frequented the growing pines; and still higher, on the Col between Vizzavona and Ghisoni, Otiorrhynchus quttula swarmed on the alder catkins on sunny calm days, and with it a single specimen of the rare Ceuthorrhynchus duvali was obtained; under stones in these high places an Asida was abundant, and a second Otiorrhynchus (corsicus), not uncommon, also one of the species of Percus found lower

Originally recorded from Ajaccio, but certainly in error.

down; and on the snow, an *Omophlus*. In a very shallow mountain pool, supplied by the melting snow, *Hydroporus griseostriatus* was plentiful, and on its banks

were two species of Bembidium, also in plenty.

Below Vizzavona, on the road to Bastia, at Tattone, in the meadows. Cetonia aurata, showing extraordinary variation in colour-black, blue, green, coppery, green with coppery thorax and scutellum, etc., - abounded on flowers, and with it were C. floricola and C. morio, Trichius zonatus, Trichodes, Bostrychus capucinus, Leptura hastata and L. fulva, Strangalia bifasciata, Stenopterus rufus, Agapanthia cardni, Clytus rhamni, Clytanthus massiliensis, Rhagonycha corsica, Malachins sardous, various Œdemeræ, etc. In the roads, etc., were found a handsome variety of Cicindela campestris, not uncommonly, and Calosoma sycophanta, occasionally; also about stercore, Sisyphus, Ateuchus, Gymnopleurus, Oniticellus, Onthophagus schreberi, Geotrupes geminatus—abundant everywhere, even on the higher parts of the mountains where the cattle are pastured in summer,—Hister inequalis, H. pustulosus, H. major, H. sinuatus, etc.

By working downwards on the road to Ajaccio, from Bocognano to Tavera, representatives of a good many interesting species were obtained. In the "macchie," by beating the arborescent heath, evergreen oak, etc., the rare Cleonus tabidus, Caulostrophus delarouzei, two species of Nanophyes, Metallites parallelus-one of the commonest weevils in the mountains—Smicronyx corsicus, Pachybrachys scriptus, Stylosomus depilis, two or three species of Clythra, etc. By sweeping the scattered flowering plants (most of which were very aromatic) on the slopes and in the meadows lots of Coleoptera came to light, as a Lixus, two species of Cardiophorus, in plenty, an Athous, a Xyletinus, two species of Danacea and various other small Malacoderms, Throscus corsicus, numerous species of Bruchus, Olibrus, and Meligethes, Hadrotoma variegata, Silaria suturalis, various Œdemeræ, Gymnetron, Anthrenus, Omophlus,

Anthicus corsicus, Hispa atra, etc.

At Ajaccio, Pimelia sardoa was abundant all round the sandy shores of the bay on both sides of the town, though more dead than living examples were seen, where also, Calathus, Pedinus, Colpotus, Crypticus, Dendarus, Tentyria, Asida, Phaleria, Chrysomela, etc., were represented by one or more species; Ammoph-

thorus rufus abounded at the roots of plants; Capnodis tenebricosa flew about in the hot sun; Saprinus semi-punctatus abounded in a dead horse, etc. Cetonia morio, two species of Anthaxia, an Acmæodera, Stenopterus ater, Phytæcia virescens, a Coptocephala, a fine large Bruchus (longicornis), Troglops silo, Colotes, etc., occurred on tlowers; Coræbus rubi, commonly on bramble bushes; Anthicus corsicus, swarming on a variety of bushes and trees on the slopes at the back of the town; Pachypus cornutus (3), on the wing in the town towards evening; Bembidium küsteri rarely, and Cicindela littoralis commonly, at Campoloro, on the sand at the

month of the Gravone, etc. At Corte, at an elevation of about 1,300 feet, some interesting small species were to be found on the banks of the Tavignano, as Lionychus sturmi, Tachys apristoides, Perileptus, the very minute Cryptohypnus meridionalis, Anthicus longicollis, two small blue Philonthi, Lathrobium labile, Scopaus, Medon, etc. In the mountain ravines, Sisyphus, Ateuchus, Akis punctata, etc., were common about stercore on the roads; and at a trickling mossy waterfall two Steni (lævigatus and strigosus) occurred sparingly. In the meadows and about the riverside near the town a good many species already met with at Bocognano were to be had by working, with the addition of Zonitis mutica and Larinus latus on thistle-heads, Malachius rufus on Umbelliferous flowers, etc.

LIST OF THE SPECIES MET WITH, SO FAR AS AT PRESENT DETERMINED.

[Those marked with a \* are given from Corsica only in the Catalogue of v. Heyden, Reitter, and Weise.]

Cicindela campestris, L., var. connata, Heer, not uncommonly on the main road at Vizzavona, Corte, etc.; one dark specimen, perhaps belonging to the var. funebris, Sturm, Corte; C. littoralis, F., commonly, on the sandy beach at the head of the Bay of Ajaccio, at the mouth of the River Gravone.

Carabus morbillosus, F., on the beach at Ajaccio; C. genei, Thoms.,\* fragments of a specimen found at Vizzavona. Calosoma sycophanta, L., a few specimens, Vizzavona. Leistus spinibarbis, F., Vizzavona. Bem-

bidium bipunctatum, Gyll., and B. agile, Duv., \* both commonly, on the banks of a shallow pool in the mountains, at about 5,500 feet elevation, on the Col between Vizzavona and Ghisoni; B. rufescens, Guér., Vizzavona; B. küsteri, Schaum, on the coast, Ajaccio; B. concinnum, Steph., river banks, Corte; B. nitidulum, Marsh., Vizzavona; B. præustum, Dej., and B. fasciolatum, Duftschm., Bocognano. Tachys apristoides, Rott., a few specimens beneath shingle on the banks of the River Tavignano, at Corte. Tachyta nana, Gyll., rarely, under bark, Vizzavona. Perileptus areolatus, Creutz, on the banks of streams, Bocognano and Corte. Synuchus nivalis, Panz., Vizzavona. Čalathus circumseptus, Germ., sea-coast, Ajaccio. Pristonychus carinatus, Chaud.,\* commonly in the beech-forests at Vizzavona, beneath loose bark. Pterostichus (Adelopterus) ambiguus, Fairm., \* commonly, with the preceding. Percus reichei, Kr.,\* P. corsicus, Dej.,\* and P. loricatus, Dej.,\* under stones, old logs, etc., in the beech-forests, also in bare places on the mountains, Vizzavona, the first-named commonly, the others more rarely; P. ramburi, Lap.,\* under rotten Opuntias, Ajaccio. Amara ovata, F., A. familiaris, Duftschm., and A. trivialis, Gyll., Vizzavoua; A. striatopunctata, Dej., on the mountains, Vizzavona. Harpalus bellieri, Reiche,\* commonly, at Vizzavona, in company with Percus; H. consentaneus, Dej., H. distinguendus, Duftschm., H. rubripes, Duftschm., and H. honestus, Duftschm., Vizzavona. Ophonus pumilio, Dej., Ajaccio. Anisodactylus binotatus, F., Vizzavona. Stenolophus teutonus, Schr., Vizzavona. Chlænius vestitus, Payk., Ajaccio. Lebia cyanocephala, L., Ajaccio. Lionychus sturmi, Gené, rarely, beneath shingle, on the banks of the Tavignano, Corte. Dromius meridionalis, Dej., and D. quadrisignatus, Dej., Vizzavona, the latter not uncommonly, under bark of beech. Brachinus sclopeta, F., Ajaccio, on the beach.

Hydroporus griseostriatus, Deg., commonly, and H. planus, F., singly, in a shallow pond on the mountains, supplied by the melting snow, on the Col between Vizzavona and Ghisoni, at an elevation of about 5,500 feet; H. memnonius, Nicol, and H. corsicus, Wehncke?\*, singly, in a slightly running stream, Vizzavona. Agabus bipustulatus, L., Vizzavona; A. binotatus, Aubé, not uncommon, in a small sluggish stream at Vizzavona; A. conspersus, Marsh., a single specimen, on the Col

between Vizzavona and Ghisoni, not differing from examples from the English coast. Gyrinus natator, L., Corte and Vizzavona.

Anacena globulus, Payk., Hemisphæra infima, Pand., and Limnebius perparvulus, Rey (?), in shallow pools on the sandy banks of streams, Bocognano; L. picinus, Marsh. (?) and Laccobius, sp., Corte. Sphæridium scarabæoides, L., and S. marginatum, F., Vizzavona. Cyclonotum orbiculare, F., Corte. Helophorus, two or three species, Vizzavona. Elmis oblongus, Kuw., Bocognano. Parnus intermedius, Kuw., in plenty, on the banks of a stream, Bocognano.

Ocalea castanea, Er. (?), Vizzavona. Aleochara spissicornis, Er., Vizzavona; A. mæsta, Grav., Corte. Ocyusa picta, Rey,\* Haploglossa pulla, Gyll., Homalota nigricornis, Thoms., Oxypoda referens, Rey, and O. fusina, Rey, fortuitously, Vizzavona. O. alternans, Grav., in fungus, Vizzavona. Phlaopora reptans, Grav., P. transita, Rey, and P. corticalis, Grav., Ischnoglossa prolixa, Grav., and I. corticina, Er., Leptusa fumida, Er., and L. (Sipalia) scabripennis, Rey,\* Placusa, sp. n. (?), Homalota cuspidata, Er., Conurus pubescens, Payk., sparingly, under bark of beech or pine, Vizzavona. Homalota fragilis, Kr., on the banks of the Tavignano, Corte. Bolitobius trimaculatus, var. kraatzi, Pand., in plenty in fungus on an old dead beech, Vizzavona. Gyrophæna sp. (?), G. manca, Er., and G. boleti, Linn., in fungus on beech, Vizzavona. Bolitochara obliqua, Er., in plenty, and B. lunulata, Payk., rarely, under bark of beech, Vizzavona. Quedius impressus, Panz., Corte. Ocypus olens, Müll., and O. cyaneus, Payk., in the road, Vizzavona. Philonthus alcyoneus, Er., and P. luxurians, Er., beneath shingle on the sandy banks of the Tavignano, Corte. P. nigritulus, Grav., Corte. Actobius prolivus, Er., banks of streams, Bocognano and Corte. Lathrobium labile, Er., rarely, with the Philonthi at Corte, on the banks of the Tavignano. Xantholinus fulgidus, Fabr., Corte. Nudobius collaris, Er., a few specimens under beech-bark, Vizzavona. Medon nigritulus, Er., banks of streams, Bocognano. Scopwus minutus, Er., banks of the Tavignano, Corte. Stenus lavigatus, Rey, about running water, on mossy stones, Vizzavona and Corte; S. strigosus, Fauv., \* in company

with the preceding, Corte; S. ater, Mann., Corte; S. asphaltinus, Er., Vizzavona and Bocognano; S. fuscicornis, Er., and S. erichsoni, Rye, Vizzavona. Trogophlaus arcuatus, Steph., Bocognano; T. corticinus, Grav., Ajaccio; T. pusillus, Grav., Vizzavona. Homalium florale, Payk., H. fossulatum, Er., H. pusillum, Grav., and H. vile, Er., Vizzavona; H. concinnum, Marsh., Bocognano. Anthobium tempestivum, Er., Vizzavona. Phlæocharis corsica, Fauv.,\* under bark of beech, very rare, Vizzavona.

Bryaxis revelierei, Saulcy (?), on the banks of streams, Corte and Bocognano. Euplectus punctatus, Muls., under bark, Vizzavona. Neuraphes dubius, Reitt.,\* under bark, Vizzavona, very rare.

Silnha granulata, Thunb., in the road, Vizzavona. Liodes humeralis, Kug., in fungoid growth on beech, Vizzavona. Arthrolips sp., Corte and Ajaccio. Trichopteryx, sp., Vizzavona. Sphærius acaroides, Waltl, on the sandy banks of the Tavignano, Corte. Cybocephalus, sp. (?), Corte. Phalacrus coruscus, Panz., Bocognano. Olibrus stierlini, Flach, Ajaccio and Bocognano; O. biplagiatus, Gnill., Ajaccio; O. affinis, Sturm, Bocognano. Triplax rufipes, F., in plenty, in fungus on beech, Vizzavona. Endomychus coccineus, L., under bark of beech, Vizzavona. Cryptophagus dentatus, Herbst, C. distinguendus, Sturm, and C. scanicus, L., Vizzavona. Enicmus minutus, L., Vizzavona; E. testaceus, Steph., and E. hirtus, Gyll., one specimen of each under beechbark, Vizzavona; E. transversus, Oliv., Corte. Lathridius productus, Rosenh., Ajaccio, one specimen. Corticaria pubescens, Gyll., C. obscura, Bris. (?), and C. gibbosa, Herbst, Vizzavona. Litargus bifasciatus, F., under bark of beech, Vizzavona. Mycetophagus quadripustulatus, L., including the var. bipustulatus, Schilsky, in fungus on beech, Vizzavona. Ipidia quadrinotata, F., rarely, under bark of beech, Vizzavona. Meligethes aneus, F., and three other spp., Bocognano. Pityophagus ferrugineus, L., Rhizophagus depressus, F., and R. ferrugineus, Payk., under bark of Pinus laricio, Vizzavona. Nemosoma elongatum, L., one specimen, on the bark of a fallen pine, Vizzavona. Tenebrioides maroccanus, Reitt., not very rarely, under bark of pines, Vizzavona. Peltis grossa, L., one specimen, in moss on the trunk of a dead beech, Vizzavona. Coxelus pictus, Sturm, abundant, Endophlæus spinulosus, Latr., rather commonly, Colydium elongatum, F., rarely, Ditoma crenata, F., rarely, and Brontes planatus, L., in plenty, beneath the bark of decaying beeches, Vizzavona. Aulonium bicolor, Herbst, commonly, in the burrows of Scolytidæ, in the bark of pines, Vizzavona. Cerylon histeroides, F., and C. ferrugineum, Steph., under bark of beech, Vizzavona. Læmophlæus pusillus, Schönh., and Silvanus unidentatus, Oliv., rarely, under bark, Vizzavona. Dermestes vulpinus, F., Ajaccio. Hadrotoma variegata, Küst., on flowers, not rare, Ajaccio, Bocognano, Vizzavona, Tattone, Vivario. Anthrenus varius, F., and A. sp. (?), common, on flowers, Ajaccio, Bocognano, etc. Limnichus incanus, Kies., Corte.

Platysoma oblongum, F., Plegaderus saucius, Er., and P. sanatus, Truqui, all three not uncommonly, beneath or in the bark of pines, apparently preying on the larvæ of Scolytidæ, Vizzavona. Hister major, L., H. inæqualis, Oliv., H. 4-maculatus, L., H. cadaverinus, Hoffm., H. sinuatus, F., and H. purpurascens, Herbst, on the roads, in dung, etc., Vizzavona; H. pustulosus, Gené, Bocognano. Saprinus semipunctatus, F., commonly, and S. furvus, Er., rarely, under a dead horse, on the beach, Ajaccio; S. chalcites, Ill., under dung in the road, Ajaccio. Paromalus parallelopipedus, Herbst, and P. flavicornis, Herbst, under bark of beech, Vizzavona.

Lucanus tetraodon, Thunb., a single 3, found in a rotten pine-stump, and another example seen on the wing, flying about the top of a tree, June 27th, Vizzavona; subsequently found in some numbers by Colonel Yerbnry. Dorcus parallelopipedus, L., in rotten beech, etc., Vizzavona, not uncommon. Ateuchus pius, Ill., in the roads, Bocognano and Tattone; A. laticollis, L., abundant about dung, Corte, Tattone, Vizzavona, Ajaccio, etc. Sisyphus schwfferi, L., abundant, with the preceding: Gymuopleurus sturmi, Macl., Ajaccio; G. mopsus, Pall., Vizzavona. Onthophagus amyutas, Oliv., O. taurus, Schr., O. nuchicornis, L., O. fracticornis, Preyssl., and O. schreberi, L., Oniticellus flavipes, F., Vizzavona, Corte, etc. Aphodius erraticus, L., A. pusillus, Herbst, A. scrofa, F., A. hæmorrhoidalis, L., Vizzavona. Geotrupes geminatus, Gené, abundant every-

where in the mountains, at an elevation of 2,500 feet and upwards, Vizzavona; G. hypocrita, Serv., Ajaccio; G. stercorarius, Linn., Vizzavona. Oryctes grypus, Ill., Ajaccio, one &. Pachypus cornutus, Oliv., one &, flying in the town of Ajaccio, towards evening. Rhizotrogus bellieri, Reiche, four specimens, found by Colonel Yerbury in July, Vizzavona. Polyphylla fullo, L., Vizzavona. Anomala junii, Duftschm., Ajaccio. Cetonia aurata, L., very abundant on flowers at Tattone, Vizzavoua, Vivario, Corte, etc., and exceedingly variable, green, blue, coppery, or black, often green with the thorax and scutellum coppery; C. Horicola, Herbst, rarely, in company with the preceding; C. opaca, Gory, and C. morio, F., Ajaccio, the latter very abundant on thistle flowers, and difficult to extract therefrom, also at Corte, etc.; C. hirtella, L., and C. stictica, L., Vivario, Vizzavona, Corte, etc. Trichius gallicus, Heer (abdominalis, Dej.), Ajaccio, and T. zonatus, Germ., rarely, Bocognano and Vizzavona.

Chalcophora mariana, Lap., a few specimens on the trunks of pines, Vizzavona; subsequently found by Colonel Yerbury in some numbers with various other Buprestide at a new saw-mill at Tattone. Cannodis tenebricosa, Herbst, not uncommonly on the coast at Ajaccio, flying about in the hot sun. Ancylochira rustica, L., A. flavomaculata, F., and A. octoguttata, L., at the saw mill, Tattone, Colonel Yerbury. Melanophila appendiculata, F., and Phanops cyanea, F., rarely, pine forests, Vizzavona. Anthaxia inculta, Germ., and A. grammica, Lap., not rarely, on flowers, Ajaccio; A. millefolii, F., Ajaccio. Ptosima 9-maculata, F., on bushes, Ajaccio. Acmæodera adspersula, Ill., not un-commonly, A. tæniata, F., rarely, on flowers, Ajaccio. Sphenoptera lineata, F., Ajaccio. Chrysobothrys affinis, F., saw-mill, Tattone, Colonel Yerbury. Corabus rubi, I., on bramble bushes, Ajaccio and Corte. Agrilus viridis, L., Vizzavona; A. roscidus, Kies., Ajaccio; A. solieri, Gory (?), Corte and Ajaccio. Trachys pygmaa, F., on flowers, Ajaccio. Throscus carinifrons, De Bonv., not rarely, by sweeping bracken towards evening, in the pine forests, Vizzavona; T. corsicus, Reitt.,\* three examples by sweeping, Bocognano and Vizzavona. Melasis buprestoides, L., in dead beech, Vizzavona. Adelocera carbonaria, Schrank, commonly,

under bark of dead pines, especially where charred by fire, Vizzavona. Elater præustus, F., commonly, under bark of pines, Vizzavona, varying greatly in the amount of black at the apex of the elytra; E. pomonæ, Steph., four specimens, with the preceding, inseparable from others from England (from the New Forest). Cryptohypnus meridionalis, Lap., rarely (and very difficult to secure), on the banks of the Tavignano, Corte. Cardiophorus ulcerosus, Gené, and C. eleonoræ, Gené, commonly, by sweeping, Bocognano. Athous rhombeus, Oliv., one specimen, Vizzavona; A. depressifrons, Desbr. (?),\* a few examples, by sweeping, Corte and Vizzavona; A. corsicus, Desbr. (?), one specimen, Corte.

Helodes genei, Guér., damp places, Corte, Vizzavona, Bocognano. Hydrocyphon deflexicollis, Müll., Corte. Cyphon, sp. (?), Vizzavona. Dictyoptera sanguinea, Scop., pine forest, Vizzavona, rarely. Telephorus pracox, Gené,\* not uncommon, on flowers of foxglove, forest of Vizzavona. Rhaqonycha corsica, Reiche, on flowers of Umbelliferæ, etc., Vizzavona, Bocognano, Vivario, Corte. Malthodes, 3 spp. (?), Vizzavona. Troglops silo, Er., three specimens, on the coast at Ajaccio. Charopus concolor, F., by sweeping, Bocognano. Colotes maculatus, Lap., on flowers, Corte and Ajaccio; C. punctatus, Er., rarely, on the sandy beach at Ajaccio. Sphinginus apicalis, Perr., a few specimens on flowers, Vizzavona. Attalus (Antholinus) sericans, Er., and sp. (?), Corte and Bocognano. Malachius rufus, Oliv., Corte; M. sardous, Er., Bocognano; M. bipustulatus, L., Vizzavona and Corte; M. (Oogynes) longicollis, Er., commonly, on the flowers of low plants on the mountains, between 2,000-5,000 feet, Bocoguano and Vizzavona; M. cyanipennis, Er., Corte. Dasytes tibialis, Muls., rarely, in flowers, pine forest, Vizzavona; D. fusculus, Ill., and D. plumbeus, Müll., commonly, Vizzavona, Ajaccio, etc.; D. pilicornis, Kies. (?), one specimen, Bocognano. Dolichosoma nobile, Kies., common, on the coast at Ajaccio. Haplocnemus impressus, Marsh., on flowers, Bocognano and Vizzavona; H. xanthopus, Kies.,\* Vizzavona; H. cribricollis, Muls.\* (?), Corte and Ajaccio. Danaca picicornis, Küst., and sp. (?), commonly, on flowers, Vivario, Vizzavona, Bocognano and Ajaccio. Clerus formicarius, L., abundant on ent pines, Vizzavona; C. 4-maculatus, Schall., one specimen, on a fallen pine, Vizzavona. Trichodes alvearius, F., Vivario and Vizzavona. Plinus fur, L., in the Hôtel Dependance at Vizzavona; P. dubius, Sturm, Vizzavona; P. lichenum, Marsh., Vivario and Corte. Dryophilus densipilis, Ab., four specimens, by sweeping, Corte. Ernobius parens, Muls., and Ernobius, sp. (?), by beating dead pine tops, Vizzavona. Xestobium rufovillosum, Deg., Vizzavona. Xyletinus laticollis, Duftschm., rarely, by sweeping, Bocognano. Metholcus cylindricus, Germ., Ajaccio. Lasioderma bubalus, Fairm., Corte.

Bostrychus capucinus, L., fortuitously, Vivario and Vizzavona. Cis boleti, L., C. setiger, Mell., C. hispidus,

Gyll., and C. sp. (?), Vizzavona.

Pachychila servillei, Sol., and Tentyria ramburi, Sol., on the sandy shores of the Bay of Ajaccio. Akis punctata, Thunb., on the roads, not rarely, near Corte. Asida carinata, Sol., abundant on the Col between Vizzavona and Ghisoni, at about 6,000 feet, under stones, also occasionally on the lower slopes, and on the roads about La Foce; A. corsica, Lap., two specimens, on the coast at Ajaccio. Pimelia sardoa, Sol., crawling about everywhere along the shore of the Bay of Ajaccio. Crypticus gibbulus, Quens., common, under stones, Ajaccio. Dendarus tristis, Rossi, Ajaccio, Vivario, and Vizzavona. Pedinus meridianus, Muls., Ajaccio and Corte. Colpotus godarti, Muls. (one 3), Ajaccio, under stones. Opatrum pusillum, F., and O. rusticum, Ol., Ajaccio. Ammophthorus rufus, Luc., abundantly, Phalaria oblonga, Küst., commonly, and P. cadaverina, F., rarely, along the shores of the Bay of Ajaccio. Diaperis boleti, L., one specimen, in fungus on beech, Vizzavena. Corticeus castaneus, F., and C. pini, Panz. (?), under bark of pines, common, forest of Vizzavona; C. bicolor. Oliv., under bark of beech, Vizzavona. Uloma culinaris, Linn., rarely, and U. perroudi, Muls., and Menephilus curvipes, F., more or less commonly, under the bark of pines, Vizzavona. Helops superbus, Muls., one of the finest species of the genus, and apparently confined to the mountain-forests of Corsica, and H. cæruleus, L., both common, beneath the loose bark of pine stumps, or of dead standing pines, Vizzavona; H. genei, Allard, four specimens, beaten from branches of a fallen pine, Isomira corsica, Muls., Bocognano; I. Vizzavona.

murina, L., Vizzavona. Omophlus lepturoides, F., Ajaccio and Corte; O. picipes, F., Ajaccio and Vizzavona. Lagria hirta, L., Vizzavona. Orchesia undulata, Kr., in fungus on beech, Vizzavona. Xylita revelierei, Muls., four examples, in the crevices of the bark of a fallen pine, Vizzavona. Melandrya caraboides, L., not uncommon, under bark of beech, etc., these specimens have the elytra bluer in colour than those from England. Salpingus nitidus, Chevr. (= reyi, or exsanguis, Abeille), four specimens, by beating dead pine branches, Vizzavona; originally recorded from Algeria. Rhinosimus planirostris, Vizzavona. Notoxus cornutus, F., Bocognano. Anthicus longicollis, Schmidt, on the sandy banks of streams, beneath stones, Corte and Bocognano; A. fenestratus, Schmidt, Corte; A. corsicus, Lap., swarming on bushes (including olive) on the hill-sides near Ajaccio, also at Bocognano. Mordella aculeata, L., M. fasciata, Fabr., and M. bipunctata, Germ., Ajaccio and Corte. Mordellistena pumila, Gyll., Ajaccio. Anaspis thoracica, L., A. pulicaria, Costa, and A. spp., Vizzavona, Vivario, etc. Silaria suturalis, Em., Corte, Vivario, Bocognano, and Vizzavona. Meloe brevicollis, Panz., two specimens, on the mountain slopes above Vizzavona, at about 4,500 feet elevation. Zonitis mutica, Scriba, abundant, on thistle-heads, Corte. Edemera podagraria, L., O. barbara, F., O. flavipes, F., O. nobilis, Scop., and O. lurida, Marsh., Ajaccio, Bocognano, Corte, etc. Stenostoma rostratum, F., on the beach, Ajaccio.

Otiorrhynchus quttula,\* Fairm., swarming on the catkins of the alder, on the summit of the Col between Vizzavona and Ghisoni, occasionally found lower down; O. intrusus,\* Reiche, Bocognano; O. corsicus,\* Fairm., a few specimens under stones, in the same locality as O. guttula. Peritelus parvulus,\* Seidl., one specimen, Vizzavona; P. (Meira) latiscrobs,\* Desbr., two specimens, by sweeping bracken in the pine-forest of Vizzavona. Phyllobius pellitus, Boh., swarming on alders, Vizzavona. Metallites parallelus,\* Chevr., commonly, by beating arborescent heath, pines, and other trees, Bocognano, Vizzavona, etc. Polydrusus leucaspis, Boh., Corte. Strophosomus coryli, F., Vizzavona. Caulostrophus delarouzei, Fairm., by beating various trees, Bocognano and Vizzavona. Brachyderes analis, Desbr., \* in plenty on pines at the upper limit of their growth on the mountain slopes above Vizzavona. Thylacites fritillum,

Panz., Ajaccio, and T. lapidarius, Gyll., Bocognano and Vizzavona, under stones. Cleonus (Plagiographus) tabidus, Oliv. (pelleti, Fairm.), one specimen, beaten from arborescent heath, Bocognano. Lixus scolopax, Boh., not rare, Ajaccio and Bocognano; L. cribricollis, Boh., Vizzavona. Larinus latus, Herbst, on thistles, Corte; L. genei, Boh., Corte, Bocognano, and Ajaccio; L. turbinatus, Gyll., Corte. Hypera pedestris, Payk., Bocognano; H. trilineata, Marsh., Corte. Pissodes notatus, F., commonly on pines, Vizzavona. Smicronyx corsicus,\* Fairm., not uncommonly, by beating arborescent heath, Bocognano and Tattone. Anoplus roboris, Suffr., Vizzavona. Brachytemnus porcatus, Germ., common, under pine-bark, Vizzavona. Acalles setulipennis,\* Desbr., and A. henoni, Bedel, Vizzavona; the latter hitherto only known from Algeria. Caliodes exiguus, Oliv., Ajaccio. Ceuthorrhynchus echii, F., Ajaccio and Bocognano; C. duvali, Bris., one specimen, beaten from alder-catkins, on the summit of the Col between Vizzavona and Ghisoni; C. smaragdinus, Bris., Corte; C. cyanipennis, Germ., Corte and Ajaccio. Ceuthorrhynchidius troglodytes, F., Bocognano. Baris insularis, Desbr., \* one specimen, Ajaccio; B. cærulescens, Scop., Corte. Balaninus elephas, Gyll., Vizzavona; B. turbatus, Gyll., and B. glandium, Marsh., Bocognano. Sibinia arenariæ, Steph., Ajaccio; S. attalica, Gyll., not uncommonly, Bocognano. Miccotrogus suturatus, Perris (?),\* one specimen, Bocognano. Orchestes erythropus, Germ., var. tricolor, Kies., and O. fagi, L., Vizzavona. Mecinus circulatus, Marsh., Bocognano; M. pyraster, Herbst, Corte. Gymnetron pascuorum, Gyll., Bocognano; G. tetrum, F., on Verbascum, Vizzavona; G. lanigerum, Bris. (?), Bocognano. Miarus campanula, L., Vizzavona. Cionus hortulanus, Marsh., Ajaccio, Bocognano, Corte. Nanophyes niger, Waltl, Bocognano and Vizzavona; N. nitidulus, Gyll., Bocognano. Apion flavofemoratum, Herbst, A. vicia, Payk., Ajaccio; A. frumentarium, L., A. eneum, F., A. malve, F., A. lavicolle, Kirby, A. brevirostre, Herbst, and other species, Corte; A. nigritarse, Kirby, and A. violaceum, Kirby, Vizzavona; A. tubiferum, Gyll., and A. subparallelum, Desbr. (?), Bocognano. Attelabus curculionoides, L., Bocognano, Vizzavona, Corte. Platyrrhinus latirostris, F., not uncommon in fungus on old decaying beechtrees, forest of Vizzavona. Scolytus rugulosus, Ratz.,

Ajaccio. Myelophilus minor, Hart., in pine-bark, Vizzavona; these specimens are unusually large, and have strongly tuberculate elytra. Hylastes ater, Payk., and H. attenuatus, Er., on the pines, Vizzavona. Cryphalus numidicus, Eichh., Tomicus sexdentatus, Boern., T. suturalis, Gyll., T. longicollis, Gyll., and T. proximus, Eichh., Pityophthorus glabratus, Eichh., and Pityogenes bistridentatus, Eichh. (?), in or under bark of Pinus laricio, Vizzavona. Crypturgus cinereus, Herbst, in the small branches of the same trees, Vizzavona. Xyleborus saxeseni, Ratz., rarely, and Taphrorychus bicolor, Herbst, commonly, on beech-logs, Vizzavona.

Bruchus longicornis, Germ., common, Ajaccio and Vivario; B. atomarius, L. (?), Corte; B. dispar, Germ., Bocognano; and various other species of the genus. Spermophagus cardui, Boh., Corte.

Spondylis buprestoides, L., saw-mill at Tattone, Colonel Yerbury, three examples. Ergates faber, L., fragments of dead specimens only, in the rotten pine-trees at Vizzavona, in June; one male bred from a pupa after return to England; female subsequently obtained in numbers at Tattone by Colonel Yerbury; the enormous & larvæ sometimes found under bark of dead standing pines. Leptura rubra, L., L. fulva, Deg., L. scutellata, F., and L. hastata, Sulz., Vizzavona. Strangalia auru-lenta, F., S. maculata, Poda, Vizzavona; S. bifasciata, Müll., Corte and Ajaccio. Stenopterus rufus, L., Vizzavona, and S. ater, L., Vivario, Corte, and Ajaccio, on Umbelliferous flowers. Cerambyx scopolii, Fuessly, Criocephalus rusticus, L., Hylotrupes bajulus, L., Vizzavona and Tattone, also found by Colonel Yerbury. Clytus arietis, L., and C. rhamni, Germ., Vizzavona and Corte. Xylotrechus arvicola, Oliv., Vizzavona. Clytanthus massiliensis, L., common on flowers, Ajaccio, Bocognano, Vivario, Corte. Morimus lugubris, F., common, in the beech-forest at Vizzavona, about logs, etc. Acanthocinus griseus, F., about twenty specimens, on a fallen pine, Vizzavona. Pogonochærus perroudi, Muls., a few specimens, in company with the preceding, in the pine-forest at Vizzavona. Anæsthetis testacea, L., one specimen, Vizzavona. Agapanthia cardui, L., Vizzavona. Phytocia virescens, F., Ajaccio, Bocognano, and Corte; P. ephippium, F., Ajaccio.

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Labidostomis taxicornis, F., and L. centromaculata, Gené, not uncommon, Ajaccio, Bocognano, and Corte. Lachnæa sexpunctata, Scop., abundant, on bushes, in the hot sun, Ajaccio, Bocognano, Vizzavona, Corte, etc. Clythra læviuscula, Ratz., Corte. Titubæa biguttata, Oliv., var. dispar, Luc., Corte. Coptocephala scopolina, L., common, flying in the hottest sun, Ajaccio. Cryptocephalus pygmæus, F., Ajaccio, Bocognano, and Vizzavona; C. moræi, L., and C. ocellatus, Drap., Vizzavona, rarely. Pachybrachys scriptus, H.-S., and Stylosomus depilis, Ab. (nec minutissimus, Germ.), not uncommon, by beating arborescent heath, etc., Bocognano. Colaspidea oblonga, Blanch., Ajaccio. Chrysomela banksi, F., and C. hæmoptera, L., Ajaccio; C. quadrigemina, Suffr., Bocognano. Lina populi, L., Vivario. Prasocuris (Hydrothassa) pumila, Reiche, Vizzavona. Luperus flavipes, L., Vizzavona. Galeruca corsica, Joann.,\* Vizzavona. Galerucella luteola, Müll., Corte. Podagrica intermedia, Kutsch., Corte. Crepidodera rubicunda,\* Perris, Corte. Haltica sp., Longitarsus spp., Bocognano. Psylliodes sp., Corte.

Hispa atra, L., Bocognano. Cassida equestris, F., Vizzavona; C. hemisphærica, Herbst, Bocognano.

Epilachna chrysomelina, F., Ajaccio. Coccinella oblongoguttata, L., and C. 18 guttata, L., on the pines, Vizzavona; C. 11-notata, Schneid., Bocognano and Corte; C. revelieri, Muls., Corte; C. conglobata, L., Vizzavona; C. 7-punctata, L., C. 22-punctata, L., Ajaccio, etc.; C. bipunctata, L., C. variabilis, Ill., and C. 14-punctata, L., Vizzavona, etc. Chilocorus bipustulatus, L., Ajaccio. Exochomus 4-pustulatus, L., Vizzavona, Bocognano, etc. Platynaspis villosa, Fourer., Bocognano. Scymnus fasciatus, Fourer., S. damryi, Weise,\* and spp., Bocognano, Vizzavona, etc.